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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/930,784	08/15/2001	William M. Gillon	50588/360	2550
32641 7590 09/26/2007 DIGEO, INC C/O STOEL RIVES LLP 201 SOUTH MAIN STREET, SUITE 1100 ONE UTAH CENTER SALT LAKE CITY, UT 84111			EXAMINER KHOSHNOODI, NADIA	
			ART UNIT 2137	PAPER NUMBER
			MAIL DATE 09/26/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

Application No.

09/930,784

Applicant(s)

GILLON ET AL.

Examiner

Nadia Khoshnoodi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 04 June 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 11-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 11-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 2/6-04-2007.

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

***Response to Amendment***

Claims 6-10 were previously cancelled. Applicant's arguments/amendments with respect to amended claims 1-3, 11, 16-17, 19, & 20 and previously presented claims 4-5, 12-15, & 18 and newly presented claims 21-23 filed 6/4/2007 have been fully considered and therefore the claims are rejected under new grounds. Examiner would like to point out that although a new reference is introduced, some of the amended limitations were found to be taught in a different embodiment of Richards, US Patent No. 6,690,795 and thus arguments supporting these new citations are detailed below in order to clarify the Examiner's interpretation. The Examiner would like to point out that this action is made final (See MPEP 706.07a).

***Response to Arguments***

Applicants contend, "There is no discussing in Richards of using encryption formats developed subsequent to one another." Examiner respectfully disagrees. Richards teaches that each month the keys and formats that the channels are encrypted in change (col. 17, lines 54-58). Specifically, Richards teaches that when the new encryption format is being implemented, there is a transitional phase to allow for a seamless migration since not all receivers obtain the new monthly channel key at the same time, and thus the encrypted channels keys must be concurrently transferred in the old and new format for delivery to all receivers, i.e. a first and a second receiver where one of the receivers has not yet been given the new channel key which is in the second encryption format (col. 17, line 59 – col. 18, line 13 and col. 17, lines 44-61).

Thus, Richards teaches the use of two encryption formats where one is developed subsequent to the other.

Due to the reasons stated above, the Examiner maintains rejections with respect to the pending claims. The prior arts of records taken singly and/or in combination teach the limitations that the Applicant suggests distinguish from the prior art. Therefore, it is the Examiner's conclusion that the pending claims are not patentably distinct or non-obvious over the prior art of record as presented.

### ***Claim Objections***

Claim 22 is objected to because of the following informalities: when using acronyms, they should first be spelled out at least once before referring to them in the condensed form. For example, the "CA" should be spelled out at least once in order to indicate the meaning of what CA stands for. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

I. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

II. Claims 1, 3-5, 11-12, and 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Richards, US Patent No. 6,690,795, and further in view of Kuykendall Jr., US Patent No. 6,031,576.

As per claim 1:

Richards substantially teaches a computer-implemented method comprising: encrypting a group of original multimedia channel keys using a first encryption format decryptable by a first multimedia receiver to produce a first group of encrypted multimedia channel keys (col. 16, line 46 – col. 17, line 13 and col. 17, line 44 – col. 18, line 4); encrypting said same group of original multimedia channel keys using a second encryption format decryptable by the second multimedia receiver to produce a second group of encrypted multimedia channel keys, the second encryption format being developed after the first encryption format (col. 16, line 46 – col. 17, line 13 and col. 17, line 44 – col. 18, line 4), and concurrently transmitting said first group of encrypted multimedia channel keys to a plurality of multimedia subscribers having either the first multimedia receiver or the second multimedia receiver, wherein said first group of encrypted multimedia channel keys is decryptable by the first multimedia receiver and said second group of encrypted multimedia channel keys is decryptable by the second multimedia receiver but not the first multimedia receiver (col. 16, line 46 – col. 17, line 13 and col. 17, line 44 – col. 18, line 4).

Not explicitly disclosed is the second multimedia receiver being developed after the first multimedia receiver. However, Kuykendall Jr. teaches that there is a push for a seamless migration of transferring receivers from analog to digital broadcasting in a manner that will not disrupt content distribution to either of the two types of receivers (col. 4, lines 11-15). Kuykendall Jr. further teaches that the new receivers, i.e. digital receivers, should be able to receive both formats during this transition period (col. 3, lines 6-20). Therefore, it would have been obvious to a person in the art at the time the invention was made to modify the method

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disclosed in Richards to incorporate this seamless migration of analog to digital receivers within a system that also changes the encryption format for multimedia channel keys in order to keep those keys secure from unauthorized users. This modification would have been obvious because a person having ordinary skill in the art, at the time the invention was made, would have been motivated to do so since Kuykendall Jr. suggest that this specific method of migrating from analog to digital will result in major cost savings in col. 2, lines 56-62.

As per claim 3:

Richards and Kuykendall Jr. substantially teach the method as in claim 1. Furthermore, Richards teaches the method further comprising: transmitting entitlement information with said group of multimedia channel keys encrypted using said second encryption format, said entitlement information indicating which of said multimedia channels a user has the right to decrypt (col. 18, lines 26-40).

As per claim 4:

Richards and Kuykendall Jr. substantially teach the method as in claim 3. Furthermore, Richards teaches the method further comprising: decrypting said second group of encrypted multimedia channel keys at a multimedia receiver (col. 7, lines 1-14).

As per claim 5:

Richards and Kuykendall Jr. substantially teach the method as in claim 4. Furthermore, Richards teaches the method further comprising: searching said entitlement information to determine whether said user has the right to view a particular channel selected by said user; and decrypting said channel using one of said decrypted keys if said user has said right (col. 18, lines 19-40).

As per claim 11:

Richards substantially teaches a system for comprising: a computer readable storage medium having stored thereon original decryption keys for decrypting said multimedia channels, wherein each original decryption key is successively encrypted in both a first encryption format and a second encryption format to produce first and second encrypted decryption keys, respectively, the second encryption format being developed after the first encryption format (col. 16, line 46 – col. 17, line 13 and col. 17, line 44 – col. 18, line 4); said decryption keys encrypted in said first encryption format being decryptable by the first multimedia receiver (col. 16, line 46 – col. 17, line 13); and said decryption keys encrypted in said second encryption format being decryptable by the second multimedia receiver but not the first multimedia receiver (col. 16, line 46 – col. 17, line 13).

Not explicitly disclosed is the second multimedia receiver being developed after the first multimedia receiver. However, Kuykendall Jr. teaches that there is a push for a seamless migration of transferring receivers from analog to digital broadcasting in a manner that will not disrupt content distribution to either of the two types of receivers (col. 4, lines 11-15). Kuykendall Jr. further teaches that the new receivers, i.e. digital receivers, should be able to receive both formats during this transition period (col. 3, lines 6-20). Therefore, it would have been obvious to a person in the art at the time the invention was made to modify the method disclosed in Richards to incorporate this seamless migration of analog to digital receivers within a system that also changes the encryption format for multimedia channel keys in order to keep those keys secure from unauthorized users. This modification would have been obvious because a person having ordinary skill in the art, at the time the invention was made, would have been

motivated to do so since Kuykendall Jr. suggest that this specific method of migrating from analog to digital will result in major cost savings in col. 2, lines 56-62.

As per claim 12:

Richards and Kuykendall Jr. substantially teach the system as in claim 11. Furthermore, Richards teaches wherein said second encryption format permits all of said keys to be decrypted in real-time as they are received by said multimedia receiver (col. 20, lines 34-41).

As per claim 14:

Richards and Kuykendall Jr. substantially teach the system as in claim 11. Furthermore, Richards teaches the system further comprising: transmitting entitlement information indicating which of said multimedia channels a user has a right to view (col. 18, lines 26-40).

As per claim 15:

Richards and Kuykendall Jr. substantially teach the system as in claim 14. Furthermore, Richards teaches the system further comprising: said second type of multimedia receiver decrypting only those keys identified by said entitlement information (col. 7, lines 1-14).

As per claim 16:

Richards and Kuykendall Jr. substantially teach the system as in claim 14. Furthermore, Richards teaches the system further comprising: said second type of multimedia receiver being configure to decrypt said decryption keys and using said decryption keys to decrypt multimedia channels identified by said entitlement information (col. 7, lines 1-14).

III. Claims 2, 13, and 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Richards, US Patent No. 6,690,795 and Kuykendall Jr., US Patent No. 6,031,576, as applied to claims 1 and 11-12 above, and further in view of Colligan et al. US Patent No. 6,415,031.



As per claim 2:

Richards and Kuykendall Jr. substantially teach the method as in claim 1. Not explicitly disclosed the method wherein said second encryption format is digital video broadcasting ("DVB") encryption. However, Colligan et al. teach that the encryption format can be DVB encryption. Therefore, it would have been obvious to a person in the art at the time the invention was made to modify the method disclosed in Richards for the second encryption format to be DVB encryption as used with the subscribers' customer keys to yield encrypted channel keys. This modification would have been obvious because a person having ordinary skill in the art, at the time the invention was made, would have been motivated to do so since Colligan et al. teach that DVB encryption may be used where the DVB standard allows simultaneous encryption of a channel for more than one subscriber station in order to protect various forms of digital content in col. 8, lines 29-41.

As per claim 13:

Richards and Kuykendall Jr. substantially teach the method as in claim 12. Not explicitly disclosed the method wherein said second type of encryption is digital video broadcasting ("DVB") encryption. However, Colligan et al. teach that the encryption format can be DVB encryption. Therefore, it would have been obvious to a person in the art at the time the invention was made to modify the method disclosed in Richards for the second encryption format to be DVB encryption as used with the subscribers' customer keys to yield encrypted channel keys. This modification would have been obvious because a person having ordinary skill in the art, at the time the invention was made, would have been motivated to do so since Colligan et al. teach that DVB encryption may be used where the DVB standard allows simultaneous encryption of a

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channel for more than one subscriber station in order to protect various forms of digital content in col. 8, lines 29-41.

As per claim 17:

Richards and Kuykendall Jr. substantially teach the system as in claim 11. Furthermore, Richards teaches the system further comprising: said second multimedia receiver being configured to decrypt a decryption key and use the decryption key to decrypt a multimedia channel (col. 7, lines 1-14).

Not explicitly disclosed is said second multimedia receiver further being configured to re-encrypt said multimedia channel using an alternative encryption format not decryptable by said first multimedia receiver. However, Colligan et al. teach re-encrypting the multimedia channels when received at a remote server in order to store the content in a secure encrypted format using a different key. Therefore, it would have been obvious to a person in the art at the time the invention was made to modify the method disclosed in Richards to re-encrypt the multimedia channels using an alternative encryption technique in order to copy protect the content before storing it. This modification would have been obvious because a person having ordinary skill in the art, at the time the invention was made, would have been motivated to do so since Colligan et al. suggest that storing the digital content in a re-encrypted form by using another key, once the digital content has been received/decrypted from a different source, allows for securely storing the content at a remote server in col. 5, lines 38-40 and col. 6, lines 5-13.

As per claim 18:

Richards, Kuykendall Jr., and Colligan et al. substantially teach the method as in claim 17. Furthermore, Colligan et al. teach the method wherein said second type of encryption is

digital video broadcasting ("DVB") encryption (col. 8, lines 29-41).

As per claim 19:

Richards, Kuykendall Jr., and Colligan et al. substantially teach the method as in claim 17. Furthermore, Colligan et al. teach the system wherein the first and second multimedia receivers are configured to store said multimedia channels in said alternative encryption format on a mass storage device (col. 6, lines 31-35).

As per claim 20:

Richards, Kuykendall Jr., and Colligan et al. substantially teach the method as in claim 19. Furthermore, Colligan et al. teach the method wherein the first and second multimedia receivers are configured to decrypt and play back said multimedia channel from said mass storage device responsive to a user request to play back said multimedia channel (col. 6, lines 36-51).

IV. Claim 21-22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Richards, US Patent No. 6,690,795 and further in view of Basawapatna et al., US Patent No. 6,598,231.

As per claim 21:

Richards substantially teaches a method comprising: encrypting a channel key using one encryption format decryptable by the first type of multimedia receiver to generate a first encrypted channel key (col. 16, line 46 – col. 17, line 13); encrypting said channel key using a second encryption format decryptable by the second type of multimedia receiver, but not by the first type of multimedia receiver, to provide a second encrypted channel key (col. 16, line 46 – col. 17, line 13); concurrently transmitting the first and second encrypted channel keys to first and second multimedia receivers of the first type and second type, respectively (col. 16, line 46 –

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col. 17, line 13); transmitting an encrypted channel to the first and second multimedia receivers (col. 16, line 46 – col. 17, line 13); within the first multimedia receiver: decrypting the first encrypted channel key using a first decryption formation to recover the channel key (col. 16, line 46 – col. 17, line 13); and decrypting the encrypted channel using the channel key (col. 17, line 44 – col. 18, line 4); and within the second multimedia receiver: decrypting the second encrypted channel key using a second decryption to recover the channel key (col. 16, line 46 – col. 17, line 13); and decrypting the encrypted channel using the channel key (col. 17, line 44 – col. 18, line 4).

Not explicitly disclosed is wherein the first encryption format is a standard encryption format and wherein the second encryption format is a non-standard encryption format. However, Basawapatna et al. teach that the type of encryption chosen is based upon whether the signal is analog or digital. These formats determine whether a standard encryption format would be used, for an analog signal, or if a non-standard encryption format is to be used, for a digital signal (col. 10, lines 22-31). Therefore, it would have been obvious to a person in the art at the time the invention was made to modify the method disclosed in Richards to use a standard encryption format if an analog signal is used and a non-standard encryption format for digital signals (including where the channels are high definition channels). This modification would have been obvious because a person having ordinary skill in the art, at the time the invention was made, would have been motivated to do so since Basawapatna et al. suggest that the encryption format is based on whether the signal is analog or digital in col. 7, lines 3-7.

As per claim 22:

Richards and Basawapatna et al. substantially teach the method of claim 21.

Furthermore, Basawapatna et al. teach wherein the standard encryption format comprises CA encryption (col. 12, lines 31-36).

V. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Richards, US Patent No. 6,690,795 and Basawapatna et al., US Patent No. 6,598,231, as applied to claim 21 above, and further in view of Colligan et al. US Patent No. 6,415,031.

As per claim 23:

Richards and Basawapatna et al. substantially teach the method as in claim 21. Not explicitly disclosed the method wherein the non-standard encryption format comprises open encryption. However, Colligan et al. teach that the encryption format can be DVB encryption. Therefore, it would have been obvious to a person in the art at the time the invention was made to modify the method disclosed in Richards for the second encryption format to be DVB encryption as used with the subscribers' customer keys to yield encrypted channel keys. This modification would have been obvious because a person having ordinary skill in the art, at the time the invention was made, would have been motivated to do so since Colligan et al. teach that DVB encryption may be used where the DVB standard allows simultaneous encryption of a channel for more than one subscriber station in order to protect various forms of digital content in col. 8, lines 29-41.

*\*References Cited, Not Used*

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Patent No. 6,772,434; US Patent No. 5,953,418; and US Patent No. 5,453,796 have been cited because they are relevant due to the manner in which the invention has been claimed.


*Conclusion*

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nadia Khoshnoodi whose telephone number is (571) 272-3825. The examiner can normally be reached on M-F: 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on (571) 272-3865. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

  
Nadia Khoshnoodi  
Examiner  
Art Unit 2137  
9/18/2007

NK

  
EMMANUEL L. MOISE  
SUPERVISORY PATENT EXAMINER